

Renewing Organisation Design: The Application of
Classical Design Thinking to Organization Design in the
Tourism Sector

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Abstract:

The purpose of this action research is the identification and experimentation of the concepts and methods used in classical design with the aim of understanding its implication for the engineering organization design theory.

This way, to renew this engineering organization design, a design space was conceived to use classical design methods in order to generate not only a design-based organization design interface for an Eco Hotel, but also to create useful methods and tools for organization design practitioners and non-organization design practitioners, which facilitate the organization design construction and maintenance. For this purpose it was applied and tested in several real organizations, interviews and focus groups.

The final result of this action research will be a design-based organization design generator and its outcome that is a unique functional, simple and sustainable Eco Hotel

design-based organization design interface that people love, considering always the context and user profile in which it is inserted.

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1- Introduction:

At the end of the 19th century with the Industrial revolution, the organization theory art and the classical design art suffered extreme revolutions. Frederick Taylor accomplished a lot in the organization design, but it fell out of favour. Part of the reason is that it had a strong engineering characteristic, though it didn't fit so well for human systems; even if this engineering organizational design had evolved with the human resources approach and useful management tools, they are constraints to generating new

and different ideas (Richard J. Boland Jr. and Fred Collopy, 2004, p16). **I will call this “Engineering-based Organization Design” with the label - EOD.**

Parallel to this there is the classical design, which is practised since the 16th century¹. Depending also on the human sense, on social, cultural, economic, political, technical and aesthetic aspects, the classical design evolved to an extreme functional and engineering design during the Industrial revolution.

Unlike the EOD, the Classical Design continued to actively mutate, and over recent decades some strong design histories changed with matters of concern like class, gender, postcolonial, voluntarism, new crisis and ecology, which have contributed to new ways of understanding the world around us today.

Lately, science has been interested in improving organization design through the use of the classical design approach in all the business dimensions (Richard J. Boland Jr. and Fred Collopy, 2004). **I will call this “Design-based Organization Design”, with the label DOD.**

My work project will focus on furthering this new approach. I will to experiment this idea, and formulate methods and interfaces that can be useful not only to create a DOD method, but also to use it in a DOD interface (an outcome of a DOD method), not exclusively for the organization design practitioners but also for non-organization designer users.

My research followed a research action process, “...a participatory, democratic process concerned with developing practical knowing in pursuit of worthwhile human purposes, grounded in a participatory worldview... It seeks to bring together action and

¹ It was practised in a very small scale, for example in royal furniture and architecture design to ornament the high society class of that time.

reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities”. (Reason & Bradbury, 2001)

With this in mind, I developed a 3-part investigation: Pre design, experimentation and results.

First I will present the pre design that is the phase of analysis that occurs before the design begins. In this part, I will present, not only some research information taken from the literature², the interviews and focus groups executed exclusively for this work project, but also the methods I used to develop the DOD. Secondly, I will describe how I experimented and took action using this research in an NGO (Non Governmental Organization) and an Eco Hotel, to experiment, learn and evolve the DOD action. Finally, I will describe the refined full-fledged DOD interface of the Eco Hotel.

2- Pre-design:

The methodology used in this action research consisted in learning about design, knowledge sharing interviews with designers and by travelling, experimenting on the field action, testing the DOD in interviews and focus groups, and comparing results. This way, the first phase was the appraisal, learning and understanding of the design art. The first readings and meetings with designers had the aim to learn about design methodologies, design concepts, design principles and creativity.

² There will be no separate literature review and methods section, as they will be incorporated into an undivided section, particularly in pre-design.

In this stage I learned and made an inquiry to designers for a better comprehension of the most important buzzwords in design, which are: **Simplicity** → Everyone understands; **Functionality** → It serves the purpose; **Beauty** → People love it; **Sustainability** → It must integrate time;

Moreover, other important principles were referred frequently in literature and in my inquiry: **Design as applied system thinking**: “*every unique problem is embedded in a larger system of problems*”. (Nadler and Hibino 1990 cited on Romme paper). **This permits to inspire passion in others** by observing, feeling or psychoanalysing the behaviour of the users and customers to understand the adequate design; and it also suggests that each situation is unique. Another important principle was that **design is something that is always mutating, meaning that constant learning is important** to create new design or change the existing one. Design is also seen as a constant updating, mainly because of its strong relation with the external environment or contextual information. This is why one of my designers’ interviewee stated “*Constant learning, knowing a little about everything and being constantly updated to the tendency is fundamental*”. In the DOD the benefits of the constant learning and the constant innovation can also follow a circular benefit spiral, as “*the long-term benefits of serial innovation*” in the HMSO³ 2001, where by learning, the organization can also develop relationships among the users, which create experiences (action) that improve systems to an ever and ever-learning cycle (*exhibit 1, p 31*). Another important principles inquired was the **pragmatic experimentation** as a work tool “*The pencil is one of the best eyes*” (Professor Jean Louis Agassiz cited in, Karl E. Weik, 2007). Finally the last more important principles inquired was, **those who carry out the solution should be involved in its development from the beginning of the process until the end**, not

³ HMSO – Her Majesty Stationary Office - It sets out the Government's plans for a 'joined up strategy for skills and business development in UK.

only because it creates values by multidisciplinary teamwork, for example, but also for a social purpose, “*In some cases the benefits of participation in creating solutions can be more important than the solution itself*”. (Romme, 2003). In (*exhibit 2, p 31*) you can see other values from classical design.

In summary, design tools and values aim at creating services that are simple, useful, desirable, harmonious, beautiful, efficient, unique and effective. They have a human-centred approach that focus not just on the customer but also in the user experience (the co-worker and customers), representing an holistic approach that considers, in an integrated method several variables: environment, strategy, structure, systems, processes, people, purpose and touch-point design decisions; it has a circle and interactive process that integrates user-oriented, team-based, interdisciplinary approaches, co-creation, methods in ever learning cycles and sustainable changes. Finally, as the work and the final design are based on social principles, it has to be made for the benefit of the community.

After this learning about classic design, I experimented the DOD in several businesses⁴ design and tested it in interviews and in focus groups (*exhibit 3, p 32*), allowing me to put people into design space, since some of them would be the business administrators of the companies DOD interface I developed during this action research. I usually challenged the participants to experiment the DOD methods and also to test the DOD interface⁵ I was developing.

⁴ Most of those businesses were entrepreneurial, because this was convergent with the design constant start-up model. Nevertheless I also tested it with established Eco Hotel businesses.

⁵ The DOD interface is the outcome of my DOD method.

In terms of methods, for classical design the EOD methods are not rich from the designer's point of view, because they are too sequential and imply a strong causality thinking that avoid the flourishing of blind spots and new ideas (Ravi Chhatpar, 2007).

In this research it was used a methodology inspired in Tim Brown⁶ products development methods (Tim Brown, 2008). It consists of 3 main spaces: **Inspiration**, that motivates the search for solutions and creates opportunity; **Ideation**, the process of generating, prototyping, developing and testing that may lead to solutions; **Implementation**, for the Charting of the path to the market. In this circular method, as we can see later, the projects may loop back frequently, mainly to the inspiration and ideation spaces, since ideas are redefined and projects take other directions. But for this research I enriched and developed this method by making a framework and the representation of one design space (*Figure 1*), a generator of DOD interfaces. Other complementary inspiration for this framework construction was the this good design definition from Bate, Khan & Pye, "*By it self, design is an empty vessel waiting to be filled with people, meanings, and actions.*" (Bate, Kahn, & Pye, 2000, cited in "Organization design and Gehry experience", Karl E. Weik, 2003). Design methods are usually described by spaces instead of vectors, having internal and external instruments (tools and signs) that mediate and guide the achievement of the expected outcome, which is contingent to other elements like processes in the activity system.

⁶ The CEO and president of a large innovation and design firm called IDEO

Figure 1: Framework for the Design-Based Organization Design

QuickTime™ and a
decompressor
are needed to see this picture.

This way the methodology followed to create DOD interfaces was a design process that generates design outcomes in the design space (the process on top of *Figure 1*), and filled it with the design components (at the bottom) I considered could contribute and guide to a DOD construction or in my case a DOD interface. To a better understanding we can view design methods from a chemical and biological language perspective, i.e. viewing the outcome solution as a chemical solution, where the design space is a “solvent”, the circular processes and the design components the “reagents”.

As we can see, first we have the **inspiration space**, which motivates the search for unique solutions, sometimes extreme ones that create opportunity. In this space, together with the participants that collaborated in this work project, we studied the words, found what’s the business sense, what were the business constraints, where were the opportunities, what has changed or may change in a near future within the organization and on the external environment. We also observed what people did, how

they think, what they need and want. We used examples to communicate. For instance, after working for two days with the Eco Hotel administrators and designers, we were talking about how to make an Eco Hotel responsible and green, and since there were functional and beautiful synergies, I suggested that we put a NGO in the middle of the organization. Then one of the administrators said: “*Well, be the owner of a foundation is a dream I always had. So why do I have to follow the great success people like António Champalimaud or Bill Gates who only made their humanitarian foundations at the end of their life?*”. Therefore I immediately started conceiving the NGO concept for this Eco Hotel.

However, it is important to notice that this inspiration space was never abandoned and it was a constant state of mind that was also created by the diversity of activities I was experiencing during the work project. For this purpose I participated in many real projects, conferences and exhibitions (e.g. BTL 2009 “Design & Hotel Industry”) to learn more about design but also to take some ideas from what I saw. I travelled to some countries in Europe such as Netherlands, France and Belgium (visiting, for example, the “Gent Design Museum” among others). This gave me a lot of inspiration and it was a kind of reset to what I observed in Portugal, not only because of the inspiration created by a different environment and culture but also because I discussed and explored this theme abroad and saw different reactions.

Secondly there is the **ideation space**, which is the process of generating, prototyping, developing and testing, that may lead to solutions. At this space I used brainstorming, made many sketches, mixed existent scenarios to finally reach the ideal solution. So I built creative frameworks, order out of chaos, using some specific principles and instruments (bottom of *figure 1*) that served as boundaries to the space, and it was

noticed that those boundaries had a huge impact in this method. I applied integrative thinking; I put users and customers in the midst of everything and described their journeys and experiences. In this part it was very important to engage in developing and codifying the external elements (*figure 1*) that help to align organization theory and DOD. After, it was prototyped and refined some more until the part of testing in which we followed the Van Aken's Alpha/Beta test interface; where *"Alpha testing involves the initial development of a design proposition, and is done by the researchers themselves through a series of cases. Subsequently, Beta testing is a kind of replication research done by third parties to get more objective evidence as well as to counteract any blind spots or flows in the design proposition not acknowledged by the researchers"* (Van Aken, 2001, in Georges L. Romme's, 2003). The testing space of this work project was made by, comparisons with other project results I was dealing with, through interviews and focus groups. I created and tested a DOD interface of an Eco Hotel with design methods and the results were tested with users, in the voluntary program called "Bairro criativo"⁷, the "Creative Quarter" (*exhibit 3, p 33*) created and coordinated by me.

Thus during the brainstorming where decisions should work fast, we used a minimal testing process by testing mainly four boundaries of the prototype, which, as referred before, are considered the four big buzzwords and principles of the design concept: Simplicity, functionality, beauty and sustainability.

The third space is **the Pre-Design based Organization Design (Pre-DOD)**, which means a final prototype conception that will be the guidance to the implementation phase, Without this pre-design, implementation can easily fall into chaos. This way, in

⁷ "Bairro Criativo" is a voluntary program from an NGO for development called AHEAD (Associação Humanitária para a Educação e Apoio ao Desenvolvimento), an entrepreneurial voluntary organization of NOVA University, which came from PUMAP (Programa de Universitários em Maputo).

this space a fledged DOD interface is created to serve that purpose. Most of the projects I participated achieved this space.

The fourth space is **Implementation**, which is the path to the market and DOD action in the field. This step happened thanks to the growing interests of the interviewees that experienced the DOD and because of my entrepreneur project “Bairro Criativo”. As far as the Eco Hotel project is concerned it couldn’t accomplish all this space since it will only start its construction in 2012. However these results will be used, and the path to the Eco Hotel DOD implementation is partly prepared since some human resources of the hotel already participated and gave their feedback.

The final space is **Post Design**, which is characterized by conducting field studies of the DOD in use, to obtain data for new versions or to improve the quality of the DOD based on new features.

Therefore, as you can see, whenever I had **new resources, new opportunities or new constraints** the process looped to the initial moment, “inspiration”. This happened for example in the Eco Hotel case, where the integration and participation of an engineer who will be the Eco Hotel maintenance manager and who is qualified to construct the screen system for the Eco Hotel DOD interface “system appraisal”, or as we call it “the team game”.

A very important characteristic of DOD framework is to fill since the beginning this design vessel or process with some guidance or boundaries like **users** (meaning, to ask constantly, who are the users or potential users?), like the **contextual information** (meaning to ask, what is the purpose? Where are we? When?), and like the **main design principles referred previously**, which can be briefly referred as: simplicity, functionality, beauty and sustainability.

Additionally the adequate **Language** (being part of simplicity elements) to the design space can be different and a complement to the EOD language but adapted to the context and users.

In terms of language, it may be a problem to the DOD if the EOD language is used. The main explanation to this fact is that in the classical design the language can be more universal, i.e. more holistic, open, artistic, with a multidisciplinary dimension, using nicknames and codes that co-workers around already understand, using images, metaphors, examples, rapid prototyping or drafts, and questioning the basic assumptions of the context where the organization is embedded: what is teaching? What is learning? What is an office? What is a hotel? What is comfort? What is tranquillity? What is activity? What is security? What is green? What does green sound? What is the form of green?

Directly taken from the classical design and designers' language, these are other elements which can be incorporated into the organizational design language:

Proximity: Items that are related to each other must be in proximity in a way that visual units are created, so that the user will see and understand the message passed by the use. *“Whatever is being created should not just look like a bunch of individual components, but it needs to hang together as a coherent whole; it must embody a distinct point of view or personality that differentiates it from what everybody else is creating using similar components.”* (Irving Wladawsky-Berger, 2007)

Alignment: The alignment of the process is very important, because those who experiment it must see that it is organized for them, in order to perceive the network.

Directions: In an organization, based on change, usually co-workers don't know what is their direction in the organization, e.g. the shapes of the DOD interface form can have a shape and suggest directions to the departments. (Fernando Lima - "The hotel business and Design" in BTL conference 2009 - Bolsa de Turismo de Lisboa – engineer and designe phd)

Contrast: The contrast is all that creates difference. In a contrast it is very important to avoid too many repetitions, if not the strong contrast that is easy to perceive will be lost, as interest, sense and emotions can be flourished by the contrast. There can be contrast by Concordance, when only one typology is used, leaving only a feature to the scenario; or by Conflict, when more than two different typologies are used, but if they are similar that is a mistake because the contrast effect will be lost. (Fernando Lima - "The hotel business and Design" in BTL conference 2009 - Bolsa de Turismo de Lisboa – engineer and designer phd)

Repetition: The repetition serves to increase the interest or expertise of the user on a role, process or system, but too many repetitions can destroy all the beauty intension.

Dynamic as opposed to static: in music, dynamics refer to the softness or loudness of a sound or note, making the music sounds groovier, richer with more emotions. In organizational theory dynamics deal with internal reaction loops and time delays that affect the behaviour of the entire system and decisions. An organization also changes with the time and the feeling of a specific situation. Dynamics also suggest movement between empty spaces and filled spaces, as the mix of walls (filled space) and windows (empty space), or in a music silence and noise.

Size, weight, structure, form, directions and colours: Those are elements of a new language that can create new forms of designing an organizational design, because it can make sense and be considered in the organizational design and structures. It is

another approach to the perception of the user and the creator, in relation to the organization as a whole. It can also be an opportunity to value things like knowledge and intangible social capital. For a structure that suggests “shapes” it can be designed according to the organization characteristics.

The result of this pre design part, was seen as a chaotic part for those experiencing for the first time, partly due to its architecture that differs from the linear and milestone-based process, (Tim Brown the IDEO Ceo, “design thinking” 2008). And also due to some emotional approaches to the organization and individuals, which classic design put in the same level instead of separating both dimensions; in opposition to the EOD approach, (Richard Daft 2001)

But when we experience this complex interactive world of design, I realize that if we make a bigger design approach using DOD rather than EOD we can create something magic that exists by the expertise of making a reaction among a creative circular process, with the users and elements like contexts and principles together. This way, design can easily create new features that can make sense to unify, to create synergies, to facilitate the creation of horizontal organizations and to shape the organization for nowadays reality, making it a more organic organization. So it can be said that classical design together with organisation theory create mainly new dimensions and solutions that are new in kind and language, the DOD interface is itself an example.

Consequently, at the end of the meetings those who experienced these methods and results (DOD interface) considered them useful, beautiful and simple tools if a simple language is used like the one exposed above (e.g. forms, shapes, size, colours, proximity, contrast, etc.) in order to perceive the organization as a whole and more loyal to reality.

According to several entrepreneurs’ revelations, when I was testing my DOD interface

in real projects, I could see that now they believe they will be able to construct a rich organization design and facilitate the organisation of their own business. Even people who I haven't formally interviewed, and companies where I only showed the results, revealed a lot of interest in those DOD interfaces and also requested this service for their future business.

3- Experimental design phase:

In this part, I will first talk about the "**Creative Quarter**" ("Bairro Criativo) which is a small voluntary program with 8 people. Its main aim is the development of creativity and behaviour of young teenagers, who live in a deprived quarter called "Bairro da Boavista". Developing their creativity with some music, art and creativity workshops, the final work will be the real production of a song made by each youngster. This is a program of AHEAD, a NGO for the development, which belongs to Universidade Nova de Lisboa.. As this program was created and coordinated by me, I had the opportunity to see how a DOD interface could produce real effects in the organization space, before the end of this project work (*Exhibit 4, p 33*). It gave me the possibility to explore the entire DOD method framework, passing several times by the post design, improving and adapting the DOD. Besides that, this part of the action research also permitted to test some tools that I used in the Eco Hotel DOD interface. Here I learned that the DOD interface is a useful tool to make co-workers perceive the organisation design. Moreover I also learned that the participation of co-workers (users) in the DOD interface conception is very important. (Michael E. Porter, Jay W. Lorsch, Nitin Nohria, 2008)It helps them to understand the processes since they also contributed to its creation. But lacking, for lately co-workers entering that functionality, simplicity, beauty and adequate language already in use. That is why this DOD interface must be dynamic and

in this case with performance and users needs as a trigger. Additionally I learned that the co-ordination with the right people is very effective in this democratic and human relations intensive DOD interface. Finally I learned that this DOD interface not only needs a strong organisation culture but it also creates one organisation culture depending on the type of external guiding elements I explained in the DOD framework *Figure 1*.

This “Bairro Criativo” experience was the proof of concept of this DOD interface, having an important influence in the Eco Hotel DOD interface conception. In this part I will just show the initial steps before its materialization.

The Construction of the DOD interface also started with some research on the Eco Hotel business, holding some meetings with top Eco Hotel managers, and with the contribution to put the external concepts on the DOD process as in *Figure 1*. Therefore with this I started creating some Eco Hotel concepts mainly by creating boundaries to my design using mainly design principles (simplicity, functionality, beauty and sustainability), because only later I learned that other DOD “reagents” (see *Figure 1*) like contextual information and users, were very important elements that were needed to be permanently active, to create an effective DOD interface.

One of these first prototypes I created was a low cost city Eco Hotel. As we can see in (*Exhibit 5, p 38*) this design is poor in features, but it still represents that particular business. Furthermore, together with a senior hotel manager it was created the organizational design of an existing hotel unit, and mixed it with the desired ones. This was important for its singular non-starting company characteristic, because most of the projects I participated with the DOD approach were entrepreneurial businesses.

Finally, and of crucial importance, due to its size and critical mass, I was used the DOD for 3 Eco hotels, focusing in a particular hotel unit, an Eco Hotel business in Gerês with

an investment of 33 million Euros. This opportunity resulted from a partnership of a 25-year-old entrepreneur and an experienced senior entrepreneur who had ideas quite convergent to mine. By putting the design concept mainly on the physical part of the business (architecture and design focused on client's experiences; see the description in *exhibit 6, p 40*). But using also classic design at the dimension of the organization was a new challenge for him. The market analysis and business plan were made with the collaboration of a project team from "École Hôtelière de Lausanne". This way, together with their team and partners I was created this quest of making the first real Eco Hotel in Portugal.

In this Eco Hotel, which will be built by the end of 2012, we started with one DOD interface that was the vision of the Administrators, incorporating also the administrators' profile, intention for their human resources profile, with the support of a multidisciplinary team constituted by designers and managers. Additionally I presented and discussed it in all my interviews and meetings to test it, as it is the business I want to design since the beginning of my research because ecology is one of the biggest opportunities nowadays and a path to sustainability. Furthermore it is an industry I have some know how.

In addition to enrich this DOD interface action experience, I prototyped some other businesses to filter some ideas for the Eco Hotel DOD Interface. This way, together with a young entrepreneur I created the DOD interface for a family wine business (*Exhibit 7, p 46*). In this situation, it was observed that this interface offered a unique and desired solution to this organization, solving familiar problems existing in the business, and also helping to create another idea for possible strategies, in part thanks to the synergies that the DOD methodology and interface enhance.

Finally It was redesigned the organizational design of a design firm whose owners are 2

designers. It was noticed that in the beginning they were designers, who hadn't created an organization design for their firm, because they only used the standards of the functional structure. So, they couldn't understand how things happened and how their organization worked and what were the critical factors that helped its operation. Now, thanks to this DOD interface they began speaking, perceiving, and organizing themselves as real designers/managers, using design and DOD as perfect tools for their organization design, and also creating an interface with the external management consultant and accountability they contracted. In *exhibit 8 on p 47*, it is presented the first DOD interface of those designer's business.

3.1 - The first results taken from the experimental phase:

Through the interviews test and practice in this DOD interface, it was learned that it allows the manager, the designer or even someone without management knowledge to design an organizational design in an easy way and with components that in the past would be impossible; thanks to the additional language referred previously and by its easiness to prototype. It also allows making a richer representation of the organization design by the integration of cross information and of the organization dimensions.

Moreover, in this DOD interface the possible synergies, team body and multidisciplinary teams can decrease the number of human resources needed, as we decreased in the Eco Hotel⁸ by multifunctionality, synergies and flexibility.

Apart from many other things I learned in this action stage, the most important one **was that this DOD interface, constructed with the participation of all the co-workers, is**

⁸ From 90 co-workers to 48 co-workers. That was also the main reason that made us change from a 5 stars luxury hotel to a 4 stars luxury hotel, because in the latter case, the human resource policies can be more flexible.

more effective. It eliminates many problems like the perception of what happens in the organization or the need for an instruction manual, creating the internal language, processes, regulation, comfort, motivation, satisfaction and responsibility. This way the Eco Hotel DOD interface will be a base to be refined some time before 2012 after the Eco Hotel training. The management team the coordinators and the directors with their team, will have to work intra-groups and among groups to perform their jobs, will make their proper rules, their process and their systems all together, using this design method and respecting the principles, the context and the wanted user of the Eco Hotel. In terms of the DOD interface it would start from a new clean space like a clean land only with its natural typology (a base connected with the exterior), where together they will construct their organization in an open book management environment. The pre-DOD presented here is the intention of the top managers and the existing working team that, of course, must be taken into consideration, but opening it to all the co-workers' desire will bring beauty. *"While it is commonly understood that design is undertaken by designers, research has revealed that a significant part of design (or decisions influencing design) is affected not by designers but by other people in the organization, such as engineers, programmers, and managers. These non-designers who have such a significant impact, often without being aware of it, have been titled silent designers"* (Bettina von Stamm, 2004)

Moreover it is important to refer that in the hotel industry the co-workers are very important, because they are humans interacting with the clients' needs, comfort and expectations. That was another reason that made this case so rich by implementing it in the Eco Hotel industry, because with design it can be created an adequate DOD for this type of work environment characteristic. In this case, it was designed a provisional "job description" (with an improvisation space) with the existent human resources, where for

example the cook of the “biological restaurant” is not just the cook but also an entertainer and the restaurant manager; or where housekeeping teams and front desk teams can create and coordinate the check-in and check-out experiences. So the improvisation and the creativity will be a space we know it will not only create risk but also the need for intense information management and an acceptance to risk.

Meanwhile, presently some of my DOD interfaces have some weak points. So for instance, for designers a product with an **instruction manual** is a failure. However this DOD interface still needs an instruction manual (like the job description) for co-workers because of its novelty. But even if it continues having the simplicity of integrating all the organization, it can be improved, for example with the help of technology, where this interface could be seen as a cellule, an astrologic map, or like “Google Earth” map, whenever you make a focus on the map new labels appear. Moreover, in stage 2 the Eco Hotel DOD interface will be simpler to deal with, as it was the case in stage 2 of “Bairro Criativo” DOD interface; when mutations happened, the design mutated too with the intervention of all the co-workers, decreasing, this way, the need for an instruction manual.

On the other hand, one of the biggest weaknesses of this DOD interface is that, it is not global and uniform in the market, taking away the possibility to be compared with the one of other organizations, being also a barrier for the entry and exit of the human resources in the worst cases created by seasonality. But for that I have a solution, which can be by coaching or by making a 3-year special contract with these seasonal additional human resources. However, if one wants to compare DOD interface, there are some possibilities, as the one I used, to compare my DOD interfaces, chart (*Exhibit 9, p 48*). Again here we can see that the profit was not the main purpose like in EOD, even

thought essential; in our mind, it was more important to make a happy co-workers' family, who were proud of working in the Eco Hotel.

4- The Design-Based Organization Design interface of the Eco Hotel

In this stage using this action research, by experiencing and learning the DOD interface on the field, or by experiencing it in other businesses, or by testing it with designers and manager meetings; the final Eco Hotel Pre-DOD was ready to be implemented.

In what we call the DOD interface of the Eco Hotel, you can see that I flattened the organization to a 2D (*Exhibit 10, p 49*) or a 3D dimension⁹ completed and integrated with co-workers positioning (*Exhibit 11.1, p 51*), based on melting and change, with an introduction design that will mutate with the organization lifecycle and anticipates it for functional and emotional causes. Some critics of this DOD interface saw it as a normal structure, but in my opinion it is more than that, it is an interface between EOD and DOD, between business man/woman and design, and between management team and co-workers, which will serve as an interface inside the organization. For more sceptic people it is a richer representation and perspective of the organization as it is, where we can consolidate, see and use many dimensions and information as you want, doing this with design, helping to integrate every dimensions and to perceive information. **It represents the structure, the organizational design, the strategy, the culture, the leadership style, the processes, and at the same time mixing human behaviour dimension and organizational dimension.** I used standards organization tools as inspiration rather than direct tools, based on changes rather than stability, spreading instead of guarding, using spaces rather than vectors in the graphic representation and in

⁹ Unfortunately I didn't have the essential support to these 3D graphics.

practice, open and based on trust instead of closed and secret, embedded instead of distributed, respect and trust rather than authority and management manipulation, organized around and between networks using 2D or 3D structures rather than the rigid hierarchical ones, based on interdependency principle rather than dependency principles, using collaborative process rather than centralization on a heroic maestro. Finally we tried to make all this simple, functional, beautiful, sustainable, harmonious, and personalized to co-workers, with design.

In this Eco Hotel DOD not only because of its situation but also because of its concept, we knew sustainability would come by the responsibility to create value to the community around (by creating employment, development, taking care) to the co-workers and to the clients, never forgetting where these agents found each other, because we are also responsible for what clients do to the local population or what the population does to the clients.

Then this DOD interface evolved to new features and more refined ones by both disciplines, organization theory and classic design. **So to show a subsystem** that suits in this DOD interface I inspired myself **on the circular design** of Romme and Endenburg, but on purpose cutting the hierarchical structure principle that this system was serving, (*Exhibit 11.2, p 51*). It is very easy to position co-workers in this interface, because the co-workers positioning has also a sense meaning. In this case, the more in the periphery of the form (the departmental space) the co-worker is, the more responsibilities, authorities, improvisation space, co-leadership, team work and benefits he will have. In a way where the inter team work and inter team decisions are made by the adequate profile worker or team of workers, among the departmental areas that have interceptions (measured by my personalized system appraisal). As you see in *exhibit 11.2* it is predicted to change from stage one to stage two through the **empowerment of middle**

management together with their team. “The mid-level managers will assume the position of the engineers of knowledge of the innovation firm” (Nonaka, Ikujiro, Takeuchi, Hirotaka, 1997). In this Eco Hotel DOD, the **participation, the creativity and the improvisation** of the co-workers will have a space, which explains also the form of our organization design; doing this by constant training and skills development given by the Eco Hotel. The Eco Hotel even gave a physical space “The project atelier” with a privileged view that will permit co-workers to create their solutions for the organization’s challenges, because it is easier to create challenges with the proper tools and infrastructures. Additionally the Eco Hotel will create competitive advantage in spiral like the learning organization design creating constant innovation.

With this DOD interface you can introduce also **the label of the organization**¹⁰ (values, culture and competition union platform) that levers the organization by taking advantage of the Gerês national park biologic rehabilitation and also by an union platform of the hotel industry competitors in Gerês region, to create a green and natural strong brand of tourism “Gerês” (as you have the Azores or the Algarve).

This DOD interface also allows us to understand the **strategy by the bigger value creation areas, which are also explained by the competitive advantage of the Eco Hotel strategy. This way, those areas will be areas of intensive teamwork and decision-making, decentralizing the “central brain” of the organization.** It is

¹⁰ The “label of the organization” is something that naturally creates an involvement, influences the worker behavior to the desired strong pillars of the culture or that creates a connection with the exterior. For example: for a Marketing organization a creativity center would be adequate; for another organization a formation/learning center would be adequate; for another one where team is important, a team and championships of any adequate sport would also be a suitable label. An organization that can’t find this label can have a problem of culture and human resource, because the same way an organization has to know its product in order to have success, an organization must know what its co-workers love and have to practise in order to be a beautiful sustainable growing organization.

suitable and more simple for **small and medium organizations** because of the distances inside the organization and because it also suits for **democratic, transformational leadership and imperatively with co leadership**, characteristics that the administrators have and believe “*It all start’s from the top*” (Michael E. Porter, Jay W. Lorsch, Nitin Nohria, 2008)

In the hotel industry we see multifunctional policies, but the co-workers are always far away from decision points, on the contrary in this case, by design principles of social beauty¹¹ and functionality I created the structure which suggests that multifunctional culture. “*Flexibility is something that's earned -- it's not something that's handed to you,*” (Jack Welch, 2006).

That is why it worked so well in “Bairro Criativo” where the participation was intense and the **work was organized by skills and functions**. This allowed us to understand how we create naturally commitment proactively as well to create the self-achievement of the hotel co-workers chose with a specific profile¹², “*They must realize that success ultimately depends on their ability to enlist the voluntary commitment rather than the forced obedience of others*”. (Michael E. Porter, Jay W. Lorsch, Nitin Nohria, 2008).

This interface is based on change and dynamic because each departmental area has a particular form that allows us to see which one are in a provisory position. This means that in the growth stage some departmental areas will change their position, i.e. a different position may affect the span of control, the authority, the chain of command,

¹¹ This part is incomplete, because all the users must live the experience and make the decision of contributing to the DOD interface.

¹² For example the co-workers that the administrators already have recruited, participated in a social voluntary work in the past and must have a strong team working skills. Some creative skills will be needed, but well balanced in terms of number, because we don’t want an entire creative team due to its chaotic management constraints.

delegation, the working team, the accountability and the responsibility. As it is the case of the “Facilities maintenance”, it will be very important to be in the first strategic area of the Eco Hotel at the introduction stage of the company life, but after words it will be important to achieve another area.

In terms of control unfortunately we must be aware, because this kind of liberal design with some creative human resources, needs some adequate regulatory policies, control systems and incentives, *“For the reluctance to embrace design is the difference between designers and managers on a number of issues, and a widespread belief that designers – or creative people in general – cannot be managed”* (Bettina von Stamm, 2004) The **control system** and the selling spots can be seen in yellow in the DOD interface. The control information focus can be eliminated when there is more important information, because in this stage of the design we were concentrated in the construction and implementation of the DOD interface and in the same time in the simplicity and functionality of the practical interface, never forgetting the beauty the context and the user (the more information there is, the more complicated the interface will be). This way with this organizational design, **it is almost imperative to have an incentive system that rewards team and individual performance**, in order to position in a natural way the co-worker by merit and honour, in an **open book system** thanks to the graphic screen¹³ that the hotel maintenance engineer is already developing (*Exhibit 12, p 56*). We decided to inspire this system in a precipitation meteorological map and a brain radiography by using the coloured results of the system appraisal of the BSC - Balanced Scored Card¹⁴ - in the base team dimension, i.e. just for the base structure

¹³ An integrated and visual screen that gives the information about the performance. To know more, see the performance appraisal part.

¹⁴ - Since it is a system that by design it can be seen as a success of integration (Richard J. Boland Jr. and Fred Collopy, 2004)

characterized by big forms and colours. Additionally to the individual performance we integrated two tools to classify individuals into three groups (A, B and C) inspired in the GE's "20-70-10" individual incentives system implemented by Jack Welch and by the sociometric test to reward and at the same time to position co-workers according to their performance and characteristics; The same DOD interface was always used in order to make that repetition effect that brings simplicity and functionality to this DOD interface (*Exhibit 12, p 56*). The process will be supported by two separate screen systems: one will give a daily feedback to the teams and departmental areas by colours of their performance, giving the sensation that it is a team game. The other screen system will inform the clients if they are being ecological or not, also by colours, receiving a price at the end that is to plant a tree. To support that, gaming is nowadays a characteristic and a passion of our society, "*Keep the change*"¹⁵ project demonstrates that design thinking can identify as aspects of human behaviour and then convert it into both clients' benefit and business value". (Tim Brown, 2008). As a new business in the region with some suppliers, who have the required service level, **we designed outsourcing** to be directly related with the direct operational level of the organization, (*exhibit 12, p 56*) distributing the power along the organization, since it is a new entrant¹⁶ and it is a scholar principle of design of simplicity coming from minimalistic period, "minus is better", that allows us to concentrate on the core business.

Finally we also decided to make periods in the Eco Hotel, following **the exchanging design** technique in which the design changes according to the theme where it is

¹⁵ "Keep the change" project was a bank project inspired on the traditional habit of putting the change on a bottle, but doing this at the credit card level, i.e. when the customer makes a transaction and the real account balance has decimals, those decimals go to another account, "saving" money to the customer without realizing he is saving that money.

¹⁶ It is an entrepreneur preference to use fewer fixed costs as much as possible in the beginning where the failure risk is high.

inserted, creating constant “surprise!”. In this particular case the design will depend on the year seasons. This way preparing special clients’ package and internal operational changes needed, consequently this will be a space of constant innovation where learning will be a very fundamental path.

5- Conclusion

In short, using design circular methods, and mix them with “reagents” or guiding elements like design principles, the users profile and the contextual information, it can conceive in an organized way many kind of DOD interface. Moreover this DOD interface will depend on the process and the guidance instruments used to conceive it, as we did in (*Figure 1*). However, what we can’t forget is that these DOD results are not a substitution for the EOD knowledge, but a complementary framework and an example of a DOD approach.

Additionally the DOD interface allowed managers, organization design creators, designers and non-designers, to design an organization design in an easy way and with an easy language. How? Creating a DOD interface between both disciplines (EOD and DOD), or between management team and co-workers, or between everyone if the users are a big mass of undifferentiated profiles; using some adequate language to make it simple to operate.

This DOD interface can have more risks and be difficult to manage in the beginning of the implementation, but after some practice and some natural human resource repositioning or exiting, the organization design will be loved and efficient. Moreover, it absolutely needs the right person on the right place, team spirit, incentives and at least a democratic leadership. This research showed that, this could be possible using a DOD interface system appraisal. With “Bairro Criativo” it

was a success, mainly thanks to the participation of co-workers in the design construction, the empowerment and the perception of what was there was, what they could see in reality, helping to gain sense, systems feeling and processes feeling within the structure, as the maxim says: “Believing is seeing”. The Eco Hotel interface proved to be a remarkable new organization design, loved by those who experienced it.

The DOD truly opens the spectrum of organization designs, mainly to replace standardization and to create new organization designs, being a very useful tool for the creation of adequate organization design to specific human gender organization, to familiar organizations, or simply to organizations where you see strong concepts, which can be represented by design.

Just before finishing, “*design is everywhere*” (Tom Peters, 1995), so if you want to use a very easy and useful tool for everyday design decision, just ask these questions: Is it simple and do people understand it? Is it functional and does it serve the purpose? Is it beautiful and do people love it? Is it sustainable? But if you want to make a more profound analyse, use the DOD framework (*figure 1*).

Finally this research also gave some lights to explore a good path to quantify intangible capital, using those methods, tools and language. We tried to make a software with this DOD framework and those quantified intangible capitals, to make a commercial tool to generate DOD interfaces. However without the technical support and the quantified intangible capital in the art it remained on the project wall waiting to be worked with the adequate support.

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Exhibits

Exhibit 1: Long-term benefits of serial innovation (HMSO¹⁷ 2001)

¹⁷ HMSO - Her Majesty's Stationery Office - It sets out the Government's plans for a 'joined up strategy for skills and business development in UK.

Exhibit 2: Other design values

- **Pragmatic experimentation**
- **Participation and involvement in decision making and implementation**
Anticipation
- **Harmony with the outside environment**
- **Willingness to take risk**
- **Accepting high level of ambiguity**
- **A passion to drive ideas through conclusion**
- **Spaces rather than vectors**
- **Focus on purpose and ideal solutions**, searching for the **effectiveness and satisfaction of the user (co-worker)**, and not just the buyer's effectiveness and satisfaction.
- **Economic and environmental sustainability**
- **Limit information depends on the spaces where the construction team uses design methodology**
- **Beware of extreme situations** like children and elderly or new niches of the society to understand simplicity. For example 10% of adults are colour blind, public and special cases such as special feminine movements that have been increasing for many years and the growth of the gay movement must be taken into consideration.

Exhibit 3: The meetings Summary

Type of meeting	Number of participants	
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Individual Interviews	8 designers 10 musicians 23 young managers 7 senior managers 7 children	
Focus groups	- First group: One designer, two managers and one engineer. - Second group: Two designers and one manager. - Third group: Three designers and one manager.	
Projects that reached the Pre-OD space	5 projects	
Projects that reached the implementation space	1 project: Eco Hotel (but it didn't finish its implementation, it continues until 2011).	
Projects that reached the Pos-design space	1 project: Bairro Criativo	

Exhibit 4: The case of the DOD interface in “Bairro Criativo”.

Concept:

Social inclusion through a musical cultural training, creativity development, cognitive development, behavioural and emotional development of children and adolescents from social and economically disadvantaged neighbourhoods (at Bairro da Boavista).

We wanted to make a very personalized volunteering program for the worst cases in terms of behaviour in the explanatory program of the same NGO for Development occurring in the same place.

Target population:

The first target population that we chose were children and young people from 13 to 15 years old, who had creative skills and some behaviour problems in another volunteering program of the same NGO, where they have been receiving private lessons since 2006.

Activity plan:

Perform a dynamic group to promote cooperation, communication and trust among the Bairro Criativo “family” members.

Perform a number of different workshops to give the necessary knowledge and technology to create the music for one song;

Allow the participants’ self-achievement through the composition and production (on a CD) of one song made by each of them.

History:

The project emerged thanks to my personal dream of creating a volunteering program related to music and education. As I had already worked and coordinated for 2 years some volunteering programs in this NGO, called AHEAD (the biggest NGO of FEUNL), I knew it would be easy to get support and management freedom.

The first step was quite hard based on uncertainty. After having all the things together, I quickly made a prototype of the operational viability and started to speak with people who could be interested in this musical project and people I wanted in my team. I scanned through the neighbourhood population to see their needs and skills related to creativity and music. After knowing who would be the children that would participate, the resources needed, the resources I had and the DOD interface that I was interested in testing, I came to the conclusion that this project would fit perfectly to a volunteering program like “Bairro Criativo”. I made it with a volunteer, who worked with me one year ago, specialized in forensic psychology and who I wanted to be my co-coordinator in this project. In three weeks we made a work team (today we call it “family”) with 8

people, more or less of my age with different backgrounds and from different social backgrounds too. The team had these disciplines: management, psychology, law, musicians and music producers. Since then we created our project all together from the basic prototype I designed, which was applauded by them, saying that it was the best representation of us. We implemented it in one month; with meetings and emails we used the DOD methods and debated the prototypes of the necessary documents to the NGO, and at the same time we designed another document to make the promotion outside the NGO. These documents would be the official ones that would show our intentions, how to put them into practice and who we were. Moreover, those documents obliged us to create our organization with the DOD methods.

DOD in the “Creative Quarter”:

We first started to question words like creativity, learning, voluntary, family, music, education, workshops, classes, neighbourhood, children etc. We also talked about the children’s educational experiences and their family lives. Finally lots of ideas appeared, which would be managed, mixed, put in the “waiting list” or affected directly to someone that would be responsible for implementing them. For example each workshop (that happened before the music production), was performed by the person who had the skill to teach that subject. That person would be the coordinator of the workshop of that week, making each departmental space (the balls around the central co-coordination) working with his own processes. Besides that at the same time he had to coordinate other volunteers, including the co-coordination, because we established that all the workshops would be very personalized and there would be, more or less, a volunteer’s support per student to help in the games¹⁸ and to give our “brand mark” to volunteer work in this educational area. In other words instead of making a mass educational program with 20 or 30 children, we chose 8 specific problematic children/adolescents and gave them a premium and personalized service to make a profound revolution on their lives, since we were 8 volunteers giving that personal monitoring, being 2 of them skilled psychologists.

Following the DOD framework (picture 1), some principles started to be integrated. All the members of the teamwork presented the principles and values they wanted.

¹⁸ The name we used instead of exercises

The values they chose were: Cooperation, cohesion, creativity, mutual help, empathy, trust, responsibility, optimism, entrepreneurship, multidiscipline and diversity, personalized and familiar environment.

Next we refined the prototype again and its final result was this DOD interface, which works well in small teams. Volunteers were positioned in a very democratic work practice and arranged according to their skills and emotional connections.

After 3 sessions in the field I perceived that the DOD interface was already implemented and operating. But I also noticed that this DOD interface was mutating. Therefore in the middle of our project I showed this phenomenon of change in our DOD interface, as follows:

The changes were mainly on the area of “psychologists and law” where the needs of intervention increased and because that area was the one with the biggest performance and participation. Contrarily to what could be expected, the co-coordination (green colour) also moved down to this “psychologist and law” approach. Since the beginning I thought it would move up to the music and production area, but that didn’t happen. That is why the “hip hop, percussion and Jazz” has a form directing outside in the second picture. This means that it has to move, or in the future it will be taken away or substituted. The “dance” area was outsourced because it deviated from our music purpose and because we didn’t have those skills inside the organization, this way being separated from the organization, and being managed directly by the “workshop and group dynamic” area. At the same time the points of control disappeared because we didn’t need them, since our values overruled that.

At this moment of change they all assumed that this DOD interface was a very useful tool, considered as our body, because of its organic and dynamic characteristic.

Additionally the vertical red bar, we see in this DOD interface, separating the NGO AHEAD and the program “Bairro Criativo”, represents the operational freedom given by the NGO AHEAD to the “Bairro Criativo” project, creating at the same time a political relationship between the two parts.

I also observed that the first 5 people who made part of the project from the beginning are the more effective and motivated ones presently; the ones who perform impossible tasks in troubled times. Those who entered in the middle of the process are more aside of all the decisions and of the processes we created to ourselves. However, they state: “We want to go every week, because we want to be integrated in this family spirit”.

Everybody loved this organization design since it suited perfectly our creative and volunteering environment. We worked like a multi disciplinary team where each skill was respected. So in most cases there were no centralized decisions, and important values like equality, came out. Everyone understood the idea and culture. Moreover, it was quite functional, though I often felt it was necessary some time to take decisions. However, these decisions were better and, no doubt, more appreciated by all.

One day after the first of three conferences we made, 3 month after the beginning of the project, I told my co-workers that my master work project was about that DOD interface. We discussed it again and the final result was that not only they understood other different DOD interface I was working on, but also gave a lot of good witnesses and suggestions to future DOD interface and methods. For instance what they could see in that “round table¹⁹” was what they saw in reality. “It is our face”, they said. They also referred that the fact of having participated in this DOD interface construction allowed them to love “Bairro Criativo” as if it was “their baby”, and that really helped to make the implementation space without any problems.

There was only one person in the 8 co-workers who said it was confusing. By the way he was one of the volunteers who joined the project in the middle of the process.

¹⁹ The name they gave to the organization design.

Finally I this project was the most appreciated one, according to the inquiry made in one of the conferences we participated in the Psychology and Education Science faculty” (FPCE- Faculdade de Psicologia e Ciências da Educação da Universidade de Lisboa), on 7th May 2009. Additionally in all the conferences the audience showed a lot of interest in our organization and in the design of the entire project.

Exhibit 5 : “First low cost city eco hotel concept”

This was my first DOD interface, designed for a city low cost Eco Hotel concept I conceived. It came to my mind when I realized that everything a hotel needed, a normal city family need it too. So I tried to create a hotel with multiple businesses, creating multiple synergies inside and outside the organization. The main idea was the creation of a strong and big brand in food, grocery products, health club and social development. As we can see in the rough picture, the hotel will have stores, which create those other businesses like a take-away restaurant, a grocery store, a laundry, a health club & Gym, a housekeepers centre, and finally a social ecological centre to take care and help populations around.

Exhibit 6: “A brief description of the Eco Hotel”:

Description of the Eco Hotel:

This Eco Hotel is a tourism development project with the aim to provide the northern region with an international luxury hotel based on nature, culture and wellness supporting an environmental, socio-cultural sustainable development, comunitarism, the incessant “surprise” and personalized service to customers and users, as Tom Peters

stated: “you must design the customers experience or the customer will design it for you” doing this by design.

Situated in an exclusive area of the National Park Peneda-Gerês, the hotel will benefit from the exclusive natural location and the mysticism aroused by the historical submerged²⁰ and communitarian village “Vilarinho da Furna” (you can feel it by the photography below), by a historical architecture, cultural characteristics, organic agriculture, specialized activities and a gastronomic unique selling proposition, which will be integrated to create the intended communitarian atmosphere, but never forgetting that we will be deeply in the 21st century. The project proposes the customers, in a luxurious context, a complete offer of nature, culture and wellness features which will also enable them to have a learning experience. Finally, based on the 45 hectares of land provided by the municipality under long term concession, the investment is estimated at €33 M.

The main concept is around the village Vilarinho das Frunas, (photography dated from 1965)

Today, this is what remains from the last historic Portuguese communitarian village.

Key success factors: comfort, tranquillity, security, multiple activities, constant “uau”, personalized service, aesthetics related to the landscape and architecture, environmental sustainability, personalised service, gastronomy, exclusive group human resource training (MICE), nature, sports, wellness and finally but very important a particular communitarian atmosphere.

²⁰ An incredible communitarian village isolated from the world in deep “Serra do Gerês”, that was submerged since the construction of a dam in 1971 by the Portuguese dictator Salazar. The Hotel architecture will be based on the reconstruction of the main road of this village that passed through the main square of the village, i.e. the main communitarian spaces of the village.

Mission

“Our objective is to offer the guests a full package of luxury services related to nature, culture and well-being. The project and the surroundings of the area will offer the customer an ongoing and subconscious learning component in National Park of Peneda-Gerês. All these aspects linked together will create unique value and differentiation for the customers”.

Segmentation and target market: These demands are predominantly visible in the luxury travel market, which are supported by the respective market segmentation seeking a cultural, natural and holistic wellness environment. Studies prove that there is a tourism tendency in choosing destinations where the density of tourists is low, demonstrating a demand for tranquillity. Considering these and other factors, the establishment will target not only domestic market but also international market (by some customers platforms that “École Hoteliere de Lausanne” facilitate in Spain, France, Germany, UK and in Netherlands. It terms of demography it will also target young and mid-aged couples together with active senior customers. With its overall unique offer, the Eco hotel will also respond to the increasingly luxury travellers who feel the need for an environmentally friendly escape, heritage and well-being.

Strategy

The hotel will apply a differentiation and focus marketing strategy. The differentiation strategy is designed to achieve a competitive advantage by creating a product or a service that is perceived to be unique in some meaningful way (Lewis, 2000). The hotel will have a distinctive historical background and will offer a learning experience through its facilities and activities. The focus strategy is aimed at serving the needs of a limited customer group or segment, based on a distinctive competency (Lewis, 2000). The hotel will offer services adapted for wealthy people seeking for nature, rural activities, tranquillity and businesses seeking for an exclusive training week. As we can see in the DOD interface, the two strong pillars of competitive advantage of the first move of this Eco Hotel will be gastronomy and farm, natural activities and M.I.C.E (meetings, incentives, conferences and exhibitions) where the hotel will be specialized in a specific area of training, where enterprises will know if they want to make a training for their co-workers in that specific management area they will know that this Eco Hotel is the best in that training, having all the human resources, infrastructures,

activities and quality level. Having in the future the ambition to create a human resources' training platform.

Differentiation

The following points will determine the differentiation factors:

- a. Exclusive location in the National Park Peneda-Gerês.
- b. Unique architecture:
 - Recreation of village with all the adequate scenario
- b. Embedded learning with every offer:
 - MICE speciality (b2b management communication)
 - Indoor and outdoor activities
 - "Living history" & mysticism
- c. The choice of two restaurants: traditional cuisine and wellness.
- d. Personalized service with personalized packages (for example: the pre matrimonial villa, where couples can experiment living together before the marriage).
- e. The delay of the check out hour.
- f. Happy co-workers that are proud to work in the Eco Hotel

General policy:

The strategic plan requires clear and transparent policies to be operated successfully. Here all the co-workers have the opportunity to propose, discuss, learn and understand well, even if it is not fully agreed by the organization. *"Do what you love. You'll be better at it"* (Francis Ford Coppola), making efficiency by emotional commitment. I followed that policy in "Bairro criativo" and it worked very effectively.

The workers' functions and positions will change for 2 month once a year, where the lower levels have the opportunity to shine in higher levels and also to practice change.

The Eco Hotel wants to define and practice a policy of open and honest management, which will lead to a frank evaluation of performance with different rewards.

This openness and active participation of all employees of the Eco Hotel will oblige them to the total confidentiality of the process.

The Eco Hotel policy will be supplemented with the following documents which

describes the organizational structure and internal processes:

- Welcome Manual;
- Functions description
- Operations manual integrated in the DOD interface.
- Code of conduct;
- System appraisal integrated in the DOD interface.

Another particularity is that the Hotel design, starting from the co-workers uniforms inspired in the traditional clothes of the old times until the experience of the arrival, staying and departure, were designed as a trigger to the sensation of mysticism, secret, refuge, tranquillity and communitarian atmosphere. For example the client's path leading to the hotel follows the yellow line in the picture above. Arriving at point 0 the client enters in the hotel and he admires all the biological park and farm during the trip until point 1 (the reception) where he makes the check in and receives a briefing about the Eco Hotel. Until now the client didn't see the village yet. He just has an idea from the main road where he can notice something in the mountain, since the villages architecture is so melted with the stone and vegetation of the Gerês mountain range, the idea is to make the sensation that that village is there for many centuries. Then a horse cart transports the client till point 2 where he feels like arriving to a spectacular lost village, arriving from above of the village, going from the top to the bottom of the village by privileged panoramic elevator, that also gives the sensation of isolation.

The infrastructures:

- 30 Villas, with 2 suits each, all thematic and unique, arranged by communitarian groups and communitarian spaces.
- Body and mind center.
- 2 Restaurants: a normal one, and a typical one where you have an interactive team teaching the traditional gastronomy.
- One MICE centre (meetings, incentives, conferences and exhibitions), and at the same time a local cultural centre, and a space for co-workers construct their projects.
- 2 pools: one external and one internal.

- 1 Farm.
- 1 Biological park with natural experiences like mediation zones, zones with music, dojos, body maintenance circuit.
- A lagoon and a river beach that will be explored cleaned and maintained by the hotel.

Exhibit 7: DOD interface prototype for a familiar wine business

Exhibit 8: Designer's business DOD interface prototype

The characteristics of this business are that the 2 Designers, Administrators and the Illustration designer (the feminine element of this DOD interface) make a lot of projects by contracting outside the organization some individual designers to make profit playing with the margins. Moreover, a contracted management company operates the managing and financing. With this prototype of the DOD interface they really could see who they are and where the problems are.

Exhibit 9: DOD interface Comparative Chart

Exhibit 10: “The base of the Eco Hotel design-based organization design interface”

Here we have the same DOD interface but using the same design software that I used in the entire work project, with poorer graphic quality.

The forms:

In the forms we can see the size of the team, the colours as identity, the directions of the forms meaning that they are planned to be changed; by changing the position to an outsource situation (in the case of the financial support), or by a change inside the organizational map, changing the position to another place where synergies will be more important (in the case of the facility and maintenance area that is very important to be in a first stage related with the first competitive advantage creation area). This DOD interface can change, melt, get fat, with separated spaces, in a dynamic world. The proposal is just the first flash (eye clic) of the organizational, with strong culture, direction, dynamics, process, strategy, leadership, boundaries and other business concepts.

Exhibit 11.1: The DOD interface with subsystems in 3D dimension

Here you can see an example of co-workers positioning using also the differentiation tool with the areas A, B and C (the interior circles in the picture).

Exhibit 11.2: “The subsystems in the Eco Hotel design-based organization design interface”

I imagined this as a molecule design:

Stage 1 is the introduction stage, where middle management is learning and working under the coordination of the administrators:

Stage 2 is the Growth stage where the organization empowers the middle management and emphasizes teamwork and co-leadership by putting them together working with their team in point C.

Additionally point A is a space of meeting between administrators and middle management of two or more synergic departmental areas. In another way point B is the space where administrators and middle management meet but separately by individual departmental area.

These systems will be distributed this way through all the base design making a subsystem network of all the department areas, being positioned differently if it is needed, in a way that all the connections are proper and work effectively. Sometimes it is only need to create informal spaces to communicate fast, like a process inspired in a walkie talkie, or limited characters sms exchange.

Legend of the subsystem:

General Managers (or manager) will lead the directing team (figures in orange). He/they will be also in contact and will work in the team at the area A where the most important functional department areas, which have a lot of synergies and directing area work together and directly.

The Operational manager (functional leader in the operation) will be the resident manager. He is the one who solves the daily operational work directly with each or both op directors of department areas (Dir 1 and Dir 2) in area B.

The Measuring and sensing of the functional departments (elected by the circular design of the functional departments) will be the controller and the eyes of the top management to see what happened in the operational activities.

This will be the director of each department, with power to decide, responsibility and the authority aligned with the Eco hotel strategy and policies. He will be connected with the functional leader from the top management at point “B”.

He will direct his departmental area with the departmental area that together creates synergies, at point “C”. This way the principal areas are managed together in a hybrid co-leadership (some projects there share leadership, others projects not).

With this organizational design the number of directors can be decreased if in which point “C” you just have a director for both departmental areas.

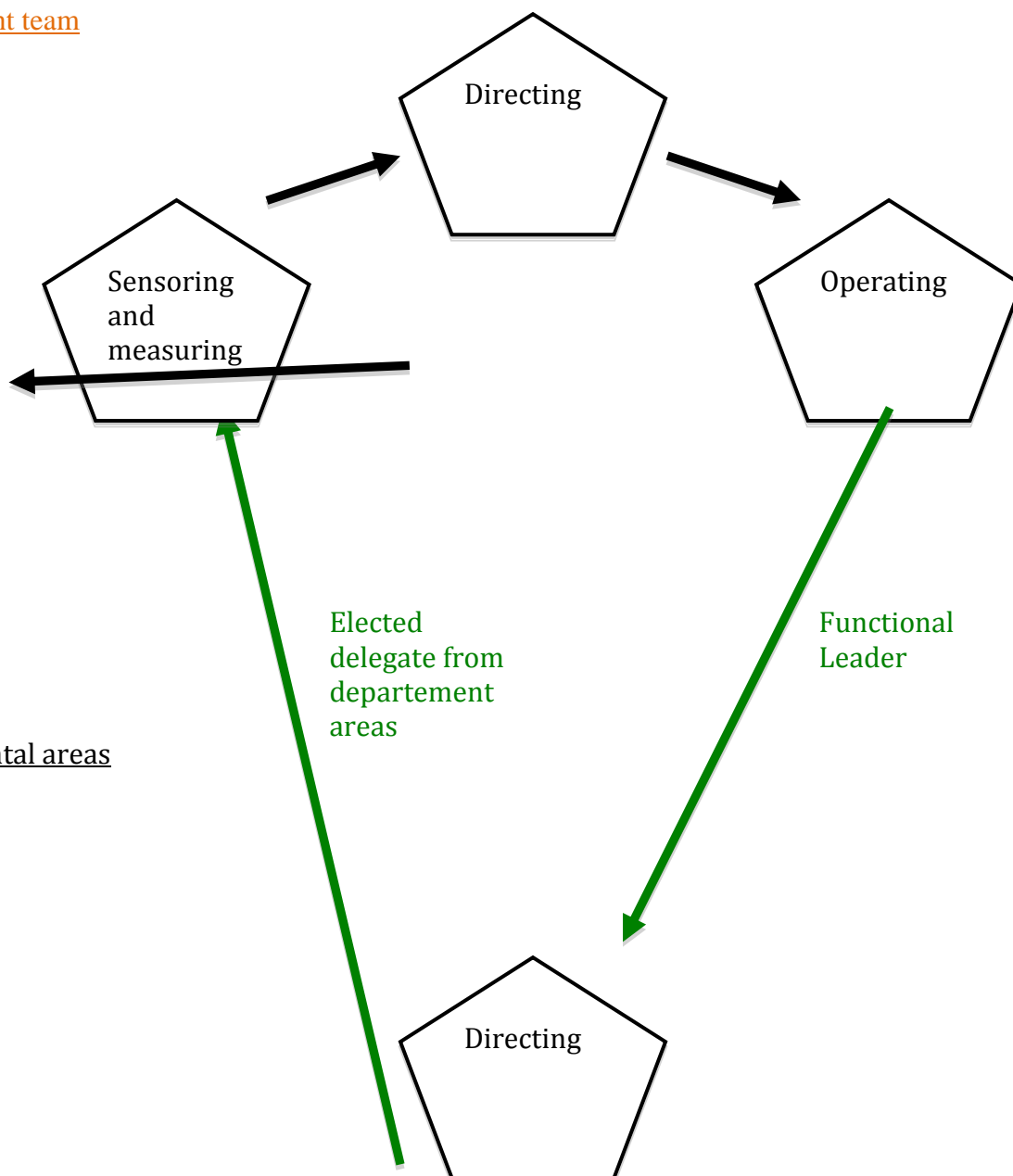
This is the operating chief and his staff, who execute and also creates new processes with their director.

The measuring and Sensoring of each departmental area can also be made also by the financial department. They report to the measuring of each departmental area with the financial department (the yellow bullets in the base design) or directly to the general manager.

The elected delegate who is the feeling of the staff. This will also be a top management panopticon control.

The circular design inspired on Romme and Endenburg.

Management team



Departmental areas

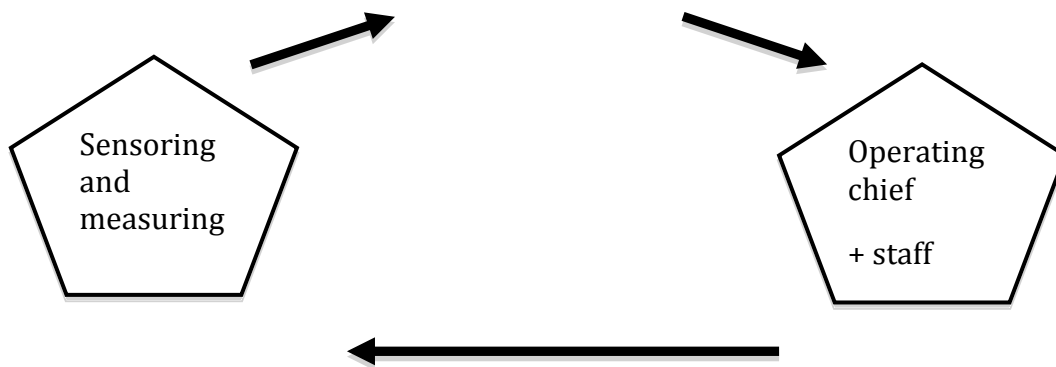


Exhibit 12: The ECO HOTEL design-based organization design performance appraisal

The performance appraisal of the ECO HOTEL will be inspired in the balanced scorecard mixed with the GE's "20-70-10" system implemented by Jack Welch and the sociometric test, but simpler because of its huge cost for a medium dimension hotel. With the help of some technology support that will simplify the measuring system and at the same time the behaviour of the workers and clients.

The Balanced Scorecard is an approach that supports the implementation of the strategy and the monitoring it at all the levels of the organization. However, we will just use it to measure the departmental areas as a whole, i.e. by teams. By linking objectives, initiatives and indicators with the strategy of the organization, the BSC ensures the alignment of organizational activities by teams in different areas around the common understanding of strategic objectives and targets to be achieved.

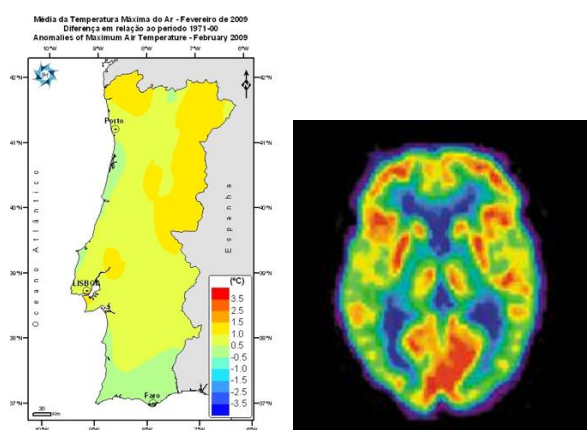
To see the richness of this system just notice that this design also focuses on the Mission, Vision and Strategy of the organization, analyzing the company under four perspectives: - Financial Perspective, what is the shareholder's perspective? - Customers' perspective, how does clients perceive the organization? - Briefing of the internal processes, which internal processes do the company considers essential? - Learning and Growth Perspective, how to improve and create value?

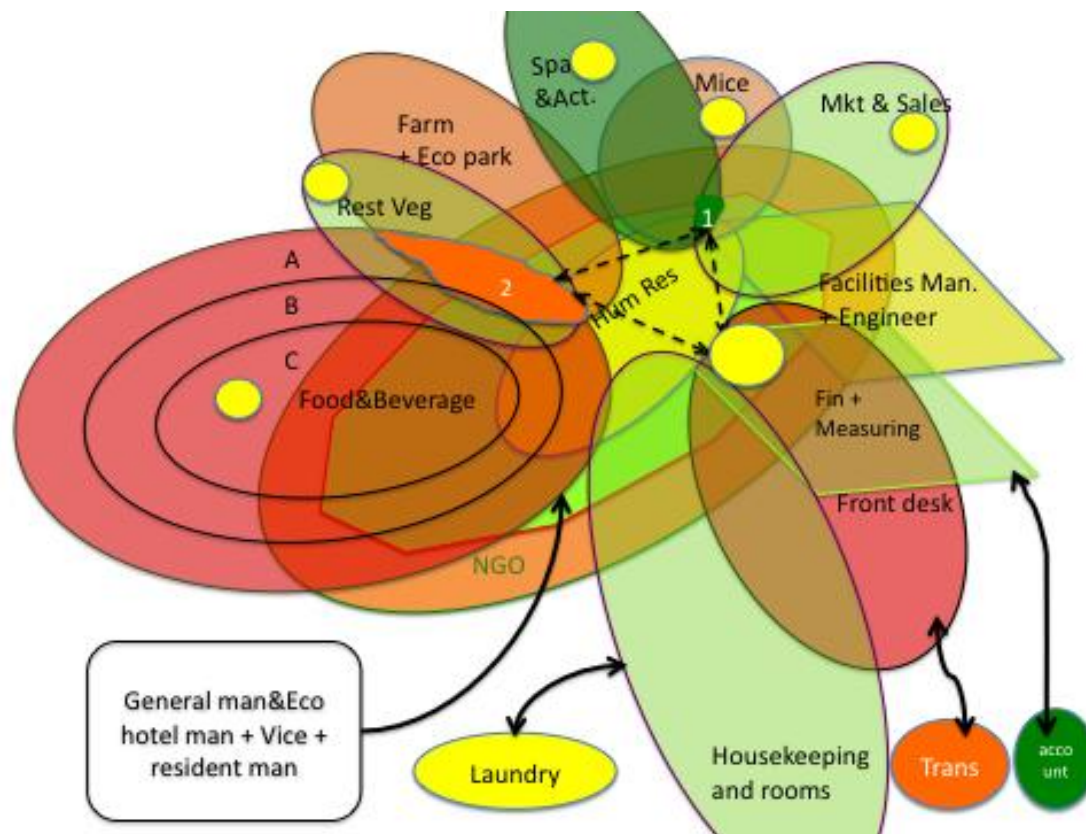
Therefore, the BSC is a good tool to make the equilibrium between the measuring and the organization strategy. The BSC will be very effective and beautiful if all the

departmental areas construct it, having in mind the values and purposes of the organization, i.e. the workers will also participate in the construction of the KPI's and some rules in the hotel working system. So the question to be asked to all the employees is: “For this space to work, which rules and values do you want to implement?”. That is why a homogeneous organization would facilitate this co-worker service personalization.

Moreover, since the final results of the balanced scorecard are the performance results represented by colours, from green to red, if we draw in this organization design the results as a meteorological map, the manager and the workers will automatically analyse, recognize and detect the performance problems or future problems. So as we can represent this like a meteorological map with colours, that will be constantly refreshed and available by all the co-workers. The screen system we are creating with the hotel maintenance engineer, will permit to have a daily updated performance feedback for co-workers. Furthermore it will also function as a game where everyday the teams want to be in a green colour.

If we use these scales colours of the balanced scorecard in our DOD interface, we can easily see where and what are the problems in one “eyes click”, or what is disturbing the teamwork results of the principal areas (see the islands at the interception of the principal activities that creates value). This is an example of what co-workers can see in that screen:





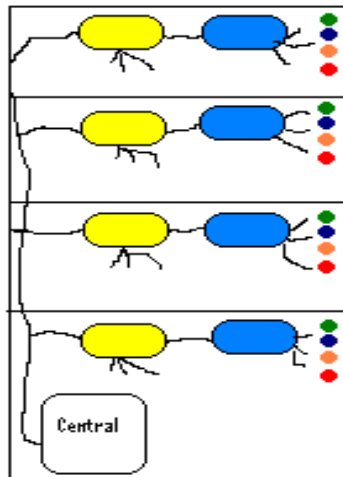
To make the individual incentives and positioning we mixed the BSC with the GE's "20-70-10" system implemented by Jack Welch, that is controversial due to its lack of beauty, but as Jack Welch said "An effective performance appraisal system relies not only on honest feedback but also on meaningful differentiation among employees". But we just used the ending classification part of his appraisal system, classifying the co-workers by areas A, B and C, as you can see in the food&beverage department area example. The classification will be dictated by the BCS individual result, the individual interview and the circular design that allows the 360° control and flow of information; all that will result on the classification of a co-worker in level A, B or C; in a way all the co-workers receive incentives but some will receive much more than the others.

At the same time, to help this co-workers positioning on level A,B or C we will use a sociometric test, since one of the administrators is an expert in the sociometric test. This test will also be used to position the co-worker in the team they fit and love the most, using this DOD interface as a simulator to see if the teams can be reformulated and equilibrated. This will allow us to have the right person in the right place.

In a summary, as we can see in the DOD interface above, the BSC will make a performance delegation of all the organization by teams (with the screen system and the

DOD interface, in a daily base) and individually at the same time to reward and to position co-workers in the team (with some features of the GE's "20-70-10" system implemented by Jack Welch and the sociometric test, in a 1 or 2 month base).

Measuring technology, “The screen system”: for the energy costs control and product consumption, being also a game for the customers and workers:



The client screen will have this aspect, showing if the client is being ecologic or not.



This multi functional system will allow all the agents to see in real time the energy and water consumption (important for an ECO Hotel), the cleaning products consumption, the food consumption and waste, and the profit of the selling spots. It also allows us to compare the past performance with the current one.

Of course with this system the cost must be arranged by activities, trying to substitute indirect costs by direct cost related with the activity. This will be very important mainly to the internal processes control of the BSC.

This screen system will also be used among the communitarian places of the hotel (normally a 3 villas complex), but this time just measuring the client energy consuming,

giving the learning experience and also used like a game to clients where in the end he can be awarded with one number of trees plantation by the Eco Hotel NGO.

This system will work with a television device that will show with colours if the three villas are being ecological or not. It will be useful for the energy consumption and targets measuring like the towel and sheets consumption. This is important since we are talking about an ECO HOTEL, but never forgetting if the client want to play this game or not, because the system can be unplugged for his villa.

This television will also be used to give instant information to the clients and workers about activities going on in the hotel. It can also be used to ecological products brands advertising or for the clients messages, or photos taken in the hotel activities during the day, i.e. a kind of *Facebook* (a social internet network), where people inside the hotel can share photos and experiences.

